

MAKERBOT NYLON CARBON FIBER | Data Sheet

Print Strong, Heat-Resistant Metal Replacement Parts

Carbon fiber reinforced nylon optimized for high strength to weight ratio, stiffness, and heat resistance making it ideal for structural applications and metal replacements.

184° C

HEAT DEFLECTION

110 MPA

TENSILE STRENGTH

7600 MPA

TENSILE MODULUS

STRENGTH TO WEIGHT

A formidable tensile strength of 110 Mpa makes MakerBot Nylon Carbon Fiber ideal for lightweighting metal parts such as robotic end effectors.

STIFFNESS

For applications that require parts hold their form with minimal flex - such as automotive brackets or inspection gauges, Nylon Carbon Fiber offers an impressive 7600 Mpa tensile modulus.

HEAT DEFLECTION

When exposed to heat other materials can deform under pressure. Nylon Carbon Fiber offers high heat deflection of 184°C making it great for higher temp under-hood and tooling applications.



| TECH SPECS | Imperial | Metric |
|--|---------------|----------|
| Tensile Strength (ISO 527) | 16,000 psi | 110 MPa |
| Tensile Modulus (ISO 527) | 1,102,000 psi | 7600 Mpa |
| Strain at Yield (ISO 527) | 2% | 2% |
| Heat Deflection Temperature (ASTM 648, 66 psi) | 363°F | 184°C |

Specifications based on data provided by the material supplier. Actual printed part specs may vary based on part geometry and print parameters selected.



COMPATIBLE PRINTER

METHOD | METHOD CF | METHOD X



COMPATIBLE EXTRUDER


METHOD Composite Extruder

METHOD

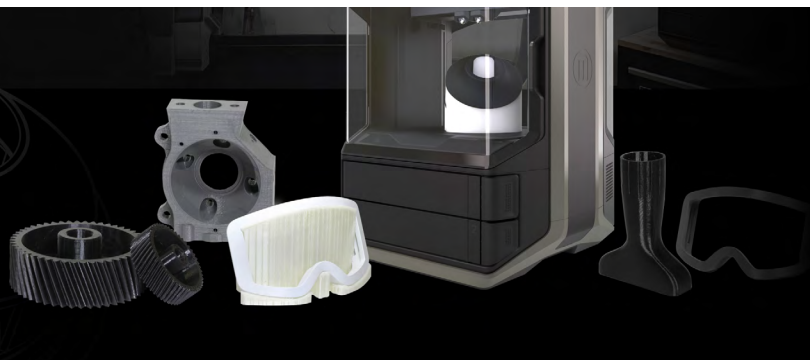
INDUSTRIAL 3D PRINTING FOR EVERY ENGINEER

Manufacturing Grade Parts with Advanced Engineering Materials on

The Next Generation Desktop 3D Printing Platform

Powered by:  stratasys

Learn more at makerbot.com/method





MAKERBOT NYLON 12 CARBON FIBER | Data Sheet

Fast and Effortless Carbon Fiber Parts

Carbon fiber reinforced nylon 12 provides the easiest carbon fiber composite 3D printing experience thanks to superior moisture resistance. Get the specs you require in any environment.

SUPERIOR
MOISTURE RESISTANCE

66 MPA
TENSILE STRENGTH

6000 MPA
TENSILE MODULUS

MOISTURE RESISTANCE

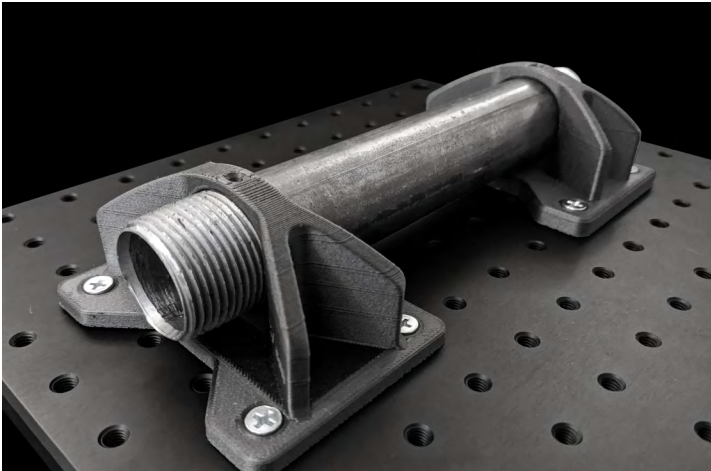
Nylon 12's superior moisture resistance means easier printing, more consistent results, and parts that can perform in a wider range of environments.

STIFFNESS

For applications that require parts hold their form with minimal flex - such as automotive brackets or inspection gauges, Nylon Carbon Fiber offers an impressive 6000 Mpa tensile modulus.

EASE OF USE

Carbon fiber is normally limited to a handful of expensive and advanced applications. Nylon 12 Carbon Fiber + METHOD makes carbon fiber accessible to anyone for nearly any application - from simple tools to complex end-use parts.



| TECH SPECS | Imperial | Metric |
|----------------------------------|-------------|----------|
| Max Tensile Strength | 9,500 psi | 66 MPa |
| Max Tensile Modulus | 870,200 psi | 6000 MPa |
| Heat Deflection Temp @ 0.455 MPa | 309° F | 154°C |

Specifications based on data provided by the material supplier. Actual printed part specs may vary based on part geometry and print parameters selected.



COMPATIBLE PRINTER

METHOD | METHOD CF | METHOD X



COMPATIBLE EXTRUDER

METHOD Composite Extruder [1C]

METHOD

INDUSTRIAL 3D PRINTING FOR EVERY ENGINEER

Manufacturing Grade Parts with Advanced Engineering Materials on

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Learn more at makerbot.com/method

